U.S. Environmental Protection Agency TMDL LISTENING SESSION

Theme: EPA's Role, the Pace/Schedule for Development of TMDLs, and NPDES Permitting Pre and Post TMDL

Atlanta Capitol Plaza Hotel 450 Capitol Avenue, SW Atlanta, GA 30312 404.591.2000

November 7-8, 2001

Meeting Summary

The third in a series of five TMDL Listening Sessions was held on November 7-8, 2001, at the Capitol Plaza Hotel in Atlanta, Georgia. A copy of the agenda is included at http://www.epa.gov/owow/tmdl/meetings/atlanta/agendaatl.html. Approximately 150 people attended the meeting, representing federal, state and local agencies, regulated industry, environmental groups agriculture, and other interested citizens. This document summarizes the ideas discussed in plenary sessions by the participants at the meeting. Comments noted on worksheets from small group discussions and those submitted by individuals may be found at Attachment A. Click here for Attachment. Click here for Attachment.

Day One: Welcome, Introductions, Review Meeting Agenda and Ground Rules

Ms. Beverly Bannister, Director, Water Management Division, EPA Region IV, welcomed participants to the Listening Session and introduced her fellow Listening Panel members: Mr. Bob Fabricant, EPA General Counsel; Mr. Robert Wayland III, Director, EPA's Office of Wetlands, Oceans, and Watersheds; Mr. Daryll Joyner, Florida Department of Environmental Protection; and Mr. Jeff Lape, Acting Director of EPA Permits Division. She provided a brief overview of current work in Region IV, and highlighted the importance of agency and stakeholder collaboration to improve water quality. She encouraged participants to continue discussion to achieve a shared vision for clean and safe water.

The facilitator, Ms. Gail Bingham, RESOLVE, reviewed the proposed meeting objectives, agenda and logistics.

<u>Presentation: TMDLs – Improving the TMDL Program</u>

Mr. Wayland opened with a presentation on improving the TMDL Program, focusing on program goals and current initiatives, the approach for revising the rule and key rulemaking issues, as well as Listening Session objectives. Mr. Lape highlighted the importance of NPDES permitting issues. He posed several additional questions to the group with respect to the permit program, suggesting that some might be best addressed in the rule and others through supplemental guidance. The questions included:

How can EPA best coordinate timing between the NPDES and TMDL decisions?

What is the best way to coordinate and conduct data collection activities?

How should EPA address TMDLs for blended waters, covering point and nonpoint sources where implementation actions take place under different mechanisms (NPDES permits, general permits or best management practices)?

How can effluent limits be derived for intermittent sources?

How can the NPDES program be used to better leverage watershed-based programs?

How can the NPDES program empower watershed-based programs and local entities to take a leadership role?

Following the presentation, Mr. Wayland welcomed any questions or comments from session participants. An individual suggested that EPA make better use of local groups in carrying out watershed-based approaches to improve water quality. Another participant asked whether there are provisions in the TMDL program for reviewing the overall ecosystem health utilizing biocriteria (not strictly chemical data). A Listening Panel member responded that EPA has put considerable effort into looking into methods for biocriteria to supplement chemical criteria, and encourages the use of biometrics. States vary in their use of biomonitoring and their faith in it. The challenge for states is to identify the impairment and the stressors for that impairment.

A commentor noted that in some areas there is an artificial distinction between developing a watershed approach and TMDLs. EPA recognizes the need to integrate the development of TMDLs with overall water quality management efforts on a watershed basis.

An individual noted his experience with and support for using market mechanisms for water quality improvements. In one example, he cited a recent visit to Decater, Illinois, where the city derives its water supply from a watershed with over 85% agricultural use. Experiments with crop insurance were promising in reducing excess nutrient loadings, but the need to bring the drinking water treatment plant into compliance with new Safe Drinking Water Act regulations was more urgent, opportunities to coordinate with the TMDL program were missed, and overall costs may end up higher than might have been the case with market mechanisms. The participant pointed out the need for a larger perspective and coordination among EPA's programs.

"What does EPA intend to do to reach out to local governments in the future?" asked one attendee. Listening Panel members cited a current EPA project collaborating with counties and local government managers. The Clean Water Act (CWA) invests authority in EPA and states but doesn't address the issue of local governments. EPA has recognized that successful, broad watershed efforts must include local government, other groups, and stakeholders and has an interest in bringing about this broad participation. The Agency has gone beyond "opening the door" to local participation to identify organizations that might assist EPA in reaching out to local governments and other important sectors for participation and input.

A participant shared his concern about the financial impact of a TMDL on his community, and the ambitious implementation schedule set by the State of Florida. Communities may have their own priorities, which may not be able to be met because of the urgency in implementing TMDLs in a given timeframe. He also requested clarification on what "reasonable assurance" means. Listening Panel members responded that the participant brought up a key issue: what is the level of assurance that load allocations for nonpoint sources are technically achievable or will be implemented?

There is a sentiment by some that the threshold of assurance may be too high; EPA is eager to hear more input. An individual asked how regulations adopted in Florida would be reconciled with the CALM criteria for listing and delisting. Panel members replied that the Florida rule is complementary with EPA's earlier drafts of the new guidance on the integrated list,. A participant expressed concerns that both approaches would make it easier to delist certain waters and, thus, decrease attention to needed water quality improvements.

Next, the facilitator reviewed the process for the small group discussion and report out to follow the mid-afternoon break.

Facilitated Roundtable Discussions: Pace and Schedule of TMDL Development and EPA's Role (Session 1)

Following the break, participants engaged in small group discussions focusing on issues associated with the pace and schedule of TMDL development and EPA's role. A plenary session followed, in which the facilitator drew out highlights from the small group discussions.

How can EPA best support and ensure that States develop TMDLs?

Participants proposed that EPA should work with states to establish processes by which the Agency can review and accept states' methodologies. This might speed up the process. The process to approve methodology needs to be consistent, within and across regions. Many participants cited funding as a primary way by which EPA could support states to develop more and better TMDLs in a timely manner. Some suggested that funding should be tied to accountability for water quality improvements, however. It would ensure that TMDLs are drafted that will result in effective implementation actions and real water quality improvements. EPA should also support developing strong science behind the TMDL work. EPA could develop and implement consequences and incentives to carry out the program effectively. Attendees also proposed that EPA establish a framework to integrate local players and stakeholders in the state's development and implementation of TMDLs, including promoting information sharing and communication. Some discussed listing criteria and specifically recommended that EPA reconsider the criteria relating to fecal coliform.

Some participants identified the need for better prioritization of the 303(b) list, citing that some states are currently avoiding more difficult problems and going for the "low-hanging fruit." EPA should focus more on prioritization of resources consistent with TMDL priorities. EPA should also provide more explicit guidance about what constitutes effective methods for TMDL development and facilitate information sharing between states and the public. Participants also pointed out the need for consistency and flexibility in regulations. Many small groups discussed the lack of technical information, and need for consistent monitoring and education.

Several small groups discussed promoting the use of data collection by third parties, noting that the states are inconsistent in their acceptance of third party data. It is imperative to develop and implement a standard operating procedure for data collection.

One approach to community education might be to establish demonstration watersheds (in pristine watersheds or others where water quality problems need to be remedied) and science and educational centers for children and local officials

to see mitigation in practice. Participants made some mention of alternative, voluntary approaches to improving water quality, pointing out that EPA still needs to support and encourage alternative and voluntary actions that contribute to achieving the goal of the TMDL. Finally, EPA should do a better job of advocating for the TMDL program and its value as a necessary program for improving water quality instead of an additional burden to be carried out.

What should be EPA's responsibility for developing the lists of impaired waters or a TMDL when states fail to do so, under what circumstances, and/or should that assertion of authority be discretionary?

Some participants commented that EPA needs to focus on working more with states, rather than using its limited resources to develop lists or TMDLs itself. Some suggested a certification program for consultants so states are assured that the TMDLs meet standards. Others proposed that EPA and the states should divide the TMDL workload to begin with. EPA should develop those TMDLs that may be more difficult or complicated than others. One small group felt that the focus should remain on states developing a methodology for their lists. They suggested that if EPA approved the methodology, then EPA would not need to approve the list. This group noted that an alternative to EPA intervention when a state fails to develop a TMDL would be to give resources to that state so it might do so, instead of EPA carrying it out itself. Some participants asked why EPA should have to review 50 different methodologies. They proposed that EPA should come up with guidance for developing 303(d) lists.

States should have a realistic time line for completing TMDLs and updating their lists every listing cycle. EPA shouldn't step in unless a state has completely failed. Some participants stated that the TMDL time line should be aggressive, and support accountability and transparency with public. EPA should establish a set protocol for communication for states to follow. In addition, EPA should provide reasonable oversight and consistency for watersheds, especially those that cross state lines or are in between regions. Several groups discussed the feasibility of EPA having more simplified approaches to TMDLs, and then provide for adaptive management.

What additional or alternative mechanisms are needed to ensure timely development of TMDLs, and which are best implemented through rulemaking?

Participants proposed defining the role of local governments and making them a partner with states and federal agencies in the process to help implement the program and speed it up. EPA might redefine TMDLs to better account for nonpoint sources and utilize best management practices, monitoring, evaluation and adaptive management instead. Others suggested that EPA should focus on tools and methodologies. Some again pointed out the downside to individual state methodologies and stated they would support better use of pre-approved state methodologies.

Participants also noted that there will remain situations where states aren't going to be able to achieve reasonable progress or to develop adequate lists or TMDLs. EPA authority still should be the backbone to reject lists and TMDLs. Approval of state methodologies cannot be the end of the line; EPA should still "spot-check" and be a "backstop."

Listening Panel Feedback

Following the small group report-out, Listening Panel members reflected on and responded to the ideas and concerns

shared. Ms. Bannister highlighted the need for additional resources for EPA and states; she also heard participants suggest that EPA develop guidance for how TMDLs should be developed. Participants also suggested demonstration watersheds as a learning forum. EPA should be consistent and flexible in the implementation of regulations and increase its efforts to ensure that sound data, including third party data, is used. EPA should encourage and support voluntary actions, and be advocates for the TMDL program.

Mr. Wayland noted ideas relating to broadening the base of organizations and entities involved in the TMDL endeavor. Some groups mentioned watershed efforts as demonstrations. Increased reliance on watershed approaches would be a natural way to engage more with all parties. He expressed interest in looking at ways to add technical rigor to developing these watershed approaches, as well as establishing better mechanisms for partnerships with accountability for water quality improvements (to avoid interventions) and a better division of labor. Mr. Wayland also heard participants ask EPA to look at it's processes for and be more responsive when reviewing both lists and TMDLs.

<u>Facilitated Roundtable Discussions: Opportunities for Improvement in the TMDL Program Generally</u>

Following a mid-afternoon break, participants joined small groups to discuss opportunities for improvement in the TMDL program generally. Each group focused on one aspect of the program: listing, nonpoint sources, permitting, and implementation, and gave input on the pros and cons of the 2000 rule, including what to change and what to build on. Following the small group discussion, the facilitator led a plenary report-out to capture the highlights and overall themes.

Listing

Small groups discussing listing pointed out problems with the current program. In many states it is difficult to determine the basis for listings without formal methodologies. For example, use of fish advisories have created challenges in listing which states are working through in different ways. Some participants supported the 2000 rule requirement for listing methodologies from states and the requirement that these methodologies should be subject to public comment. Several small groups suggested that states should be required to do a listing methodology with guidance from EPA to help develop sound approaches. Another group brought up that EPA should be consistent in approving methodologies and water quality standards. Group members recommended that states should continue monitoring water bodies following implementation and EPA should develop clear criteria for de-listing (as for listing impaired waters) including verifying that water quality improvements are being achieved not just that a plan was written. One group suggested that EPA implement a provision to ensure that state agencies further study waters listed on the planning list. Some participants supported the integration of the 305(b) and 303(d) lists, while others did not.

Nonpoint Sources

One group pointed out that the concept of calculating loadings for nonpoint sources is complicated due to the voluntary nature of BMPs and lack of information about BMP effectiveness. That conversation led to a discussion of adaptive management. Participants in that small group generally agreed that the TMDL process is an appropriate mechanism for identifying problems related to nonpoint sources, but the challenge is to allocate and implement the specific targets for point and nonpoint sources. Implementation of point source reductions is more defined, while nonpoint sources need to

be addressed with more innovative, flexible, adaptive and less tested management approaches. Due to the limited information available about abating nonpoint source pollution, EPA should test different approaches, and then monitor those approaches to see if they are meeting the goal. Some participants supported further thinking about how to achieve greater certainty in defining and demonstrating what voluntary measures can achieve in order to provide the "assurance" the point sources need that the allocations of reductions will be equitable and achievable.

One small group felt that education, not TMDLs, may be an effective method for dealing with nonpoint sources. Some participants supported local watershed approaches to address the reduction of nonpoint source loading. They suggested that EPA promote a watershed approach in the new rules. Federal assistance, cost-share incentives, and education on impairments should be used to assist in implementing best management practices. EPA should facilitate information exchange among states regarding successful programs and even build a database with that information. Universities could be utilized much more to standardize data collection, keep data banks and do monitoring. Finally, EPA should also consider air deposition issues.

Permitting

One small group discussing permitting divided the topic into pre-TMDL and post-TMDL development. Pre-TMDL issues include the lack of a basis for establishing permit limits. One solution may be to retain the same permit limits or require monitoring. If more restrictive limits are set pre-TMDL, permittees may be faced with anti-backsliding provisions, in some cases leading to overly-restrictive permit conditions in waters that are no longer impaired. Participants asked how states can decide on a more restrictive limit for new discharges if the TMDL is not set yet. Others asked how any discharges could be approved in listed waters. Offsets could be used post-TMDL development. Other participants shared concern regarding offsets because if they are used and nonpoint sources do not meet reductions, point sources are held responsible. If trading is done earlier, liability might stay with the nonpoint sources.

A group pointed out that current regulation didn't adequately address the importance of sound science; a small number of samples are often utilized to characterize large watersheds. Some positive aspects of the 2000 rule included the establishment of a schedule in the rule, although some participants pointed out that it needed to be more flexible and recognize that certain pollutants require more time to address adequately. EPA might consider implementation schedules based on need, difficulty, and/or to encourage the generation of needed data.

Some participants identified issues associated with the TMDL program but didn't agree that solutions should be included in a new regulation; instead they should be handled with guidance. The issues included: anti-backsliding, compliance schedule, and phased TMDLs. One small group didn't find any "pros" in the 2000 rule regarding permitting; group members didn't like the permitting time frame and provisions about administratively continued permits in the rule.

Participants also expressed discomfort regarding reasonable assurance in the 2000 rule. Some noted that it is difficult to define. On the other hand, point sources need some sort of assurance that the nonpoint sources will actually achieve their share of load reductions. Others were concerned that this might place more regulatory-like burdens on nonpoint sources. A possible definition of reasonable assurance is that BMPs are technically feasible; others felt this is not

enough. Several groups recommended aggregate wasteload allocations to facilitate trading.

Implementation

Some participants proposed that EPA consider separating TMDL development from implementation steps, allowing more time for the development of implementation plans. A greater role for local governments could be identified during the implementation phase through greater emphasis on watershed plans and/or reviving the old, Clean Water Act Section 208 process. One small group favored incremental improvements during the implementation phase. EPA could provide more technical support to local governments to identify what is achievable through specific practices in a local watershed plan. The Section 319 grant program needs to be revamped and streamlined. One group raised the idea that grant money to local municipalities, even if it were passed through from the state, might result in better use of dollars.

One group shared an overall desire for greater flexibility. Some participants asserted that EPA is overstepping its regulatory authority in the 2000 rule. Participants also liked current actions being taken by EPA (including the Listening Sessions) and discussion to generate creative ideas. They supported the idea of incentives and volunteer programs for nonpoint source compliance, proposing that EPA look at best management practices being implemented by farmer-producers or landowners. EPA should give farmers assurance that if they continue to follow certain best management practices, EPA will wait 15-20 years before coming back with TMDL changes or an "out of compliance" ruling. EPA should encourage interagency cooperation and not overlook critical agencies that need to be involved in implementation of this and other programs.

One small group focused on the need to solve inequities between nonpoint and point source dischargers. More guidance is needed for nonpoint sources, as well as additional resources to put plans into place. Participants also proposed that stakeholders utilize their opportunities to work outside of EPA and use other programs to put voluntary best management practices into place.

Listening Panel Feedback

Mr. Joyner commented that he heard the need for state listing methodologies. Participants suggested that these methodologies would need to address de-listing in a consistent manner. They also addressed data adequacy and value of the planning list. The new rule should require monitoring within a certain time frame for all waters on the planning list. With regards to permitting during the interim between listing and a TMDL, he heard that participants didn't want permit limits to be tightened but to keep the status quo and require monitoring. Mr. Joyner reflected that he did not hear a large theme emerge from the group with regards to permitting. He expressed support for the idea of different criteria for listed vs. non-listed waters. Participants shared that the rule was too focused on point sources.

Mr. Wayland shared that he also heard many comments regarding implementation focused on the challenge of achieving improvements anticipated by TMDLs within the nonpoint source community. Participants expressed concern about being able to calculate loadings and quantify load reductions from nonpoint sources. The idea to follow an adaptive management approach, adopting certain best management practices instead of a reduction target and then see whether what is accomplished is enough and what is needed next was also discussed at the Chicago meeting. EPA should

consider several suggestions such as searchable databases and information sharing on techniques that work as it moves forward. The need for additional guidance on a number of issues was a strong theme shared by many present. He heard participants emphasize the need for a greater role for others in the program; EPA should rely on local governments, other federal agencies, and others to support the implementation and perhaps development of TMDLs. There is an interest in making sure that the tools used to accomplish nonpoint source reductions are appropriate for individual landowners. Finally, Mr. Wayland reflected that what participants expressed about nonpoint and point source equity was strongly shaped by their own affiliations. He noted that more funding clearly is needed; EPA is looking optimistically at the Farm Bill with possible added funding for conservation programs.

Day One of the Listening Session adjourned at 6pm.

Day Two – Review Agenda and Follow Up on Questions from Day One

As Day Two of the Listening Session began, the facilitator opened up the discussion for participants' reflections on Day One. A participant suggested that EPA should take a leadership role assisting states with methods for consulting with stakeholders. It takes a lot of time to keep people involved. Another participant expressed frustration about the extensive discussion regarding public participation on the state and EPA levels; part of the frustration that citizens and environmental organizations in Florida have experienced is that citizens can come forward in large numbers (e.g., to object to a listing rule) and still have little impact. People want to use water according to its use designation. Success will be achieved when the waters are cleaned up and protected in a way that is meaningful. EPA should not overlook the needs of the general public. Listening Panel members responded that EPA is committed to the objectives expressed; the challenge is to translate that commitment into decisions in a regulatory process and through opportunities with other programs.

A participant commented that point sources are utilizing the water resources to contribute to the economic viability of the state and the nation. They are engaged in these discussions about the TMDL program because they know they also have had to do a better job at what they do to protect water resources. He encouraged other participants to keep a positive attitude, not label one another, and be involved at these meetings together to make their message heard. Simply lobbying with written comments would be foolish; EPA should continue to encourage people to be more engaged. An individual added that urban areas are one of the biggest sources of pollution; all citizens have responsibility for impairment in one way or another.

Listening panel members agreed that, given EPA's organizational structure and limitations, it cannot be directly engaged in many local efforts but it does have the means at the national level to put tools in the hands of those groups just as it should be doing for technical aspects of TMDLs. EPA has a strong commitment to doing so and already supports promising and effective efforts underway (e.g., the National Watershed Forum). Although EPA recognizes the limitations on its ability to be in every watershed meeting, there are ways that it can and should help and will continue to look for those in the future.

Facilitated Roundtable Discussions: NPDES Permitting Pre- and Post-TMDL

Participants then engaged in small group discussions focusing on NPDES permitting pre- and post-TMDL. Discussion focused on: (1) How can we assure timely implementation of TMDLs through NPDES permits, and what are the issues and barriers; (2) what actions should EPA consider in the absence of state action on an expired and administratively continued permit and under what circumstances; and, (3) what actions should be taken for permits on impaired waters prior to completion of a TMDL? A plenary session followed, in which the facilitator drew out highlights from the small group discussions.

How can we assure timely implementation of TMDLs though NDPES permits? What are the issues and barriers?

One group discussed what to do for a new source in an impaired water for which there is not yet a TMDL; states need some guidance for how they can issue permits in such situations. Some suggested utilizing monitoring requirements for new and existing sources where TMDLs have not been established. For the many nonpoint sources that are not regulated through the NPDES program, some participants recommended more studies on the effectiveness of best management practices. Another small group focused on resources as a significant concern for all stakeholders involved with NPDES permits, including both the permittees and the permit writers. Others highlighted the need to establish ambient monitoring on a regular basis in a coordinated manner. In MS4 (municipal separate storm sewer system) permits, sampling requirements set out in the Clean Water Act don't work well based on regional differences; they should be regionalized for greater effectiveness.

Funding generally constitutes a major barrier to implementation.

Participants also shared concerns about implementation challenges in the current structure of the NPDES program. For example, the five-year time frame on permits and different time schedules for permits can be barriers to use of sophisticated trading mechanisms. It also can take longer to develop credible control programs and monitoring programs.

Others discussed the timing of implementation, and that point and nonpoint sources need to be dealt with in different fashion. EPA and states should focus efforts on the cause of impairment in a waterbody, which then would focus implementation efforts. One group discussed how to deal with nonpoint sources in great depth. One aspect that needs to be recognized is that NPS pollution tends to be episodic. One group reinforced the concept of timing for nonpoint source dischargers that have to develop new technology. Once nonpoint sources know what to do, the scheduling is more straightforward.

Others discussed asking states to use contractors for critical TMDLs. EPA should also try to use a watershed permitting approach to get dischargers all on the same cycle for a particular TMDL. TMDLs that are on the 303(d) list need to be highly prioritized so the more critical problems are addressed first. Participants asked how TMDL regulations in direct conflict with the way storm water permits were originally set up will be handled. How are local municipalities supposed to deal with standards and how they are set up? Some participants suggested that EPA should implement a general educational program in every state about what nonpoint source pollution is. EPA could also take on a role in educating agriculture and take a collection of success stories around the country so others can learn. One small group discussed the value of age- and grade-specific lesson plans to raise awareness in kids of how to deal with

NPS pollution, much like what was done with recycling a generation ago.

What actions should EPA consider in the absence of state action on an expired and administratively continued permit? Under what circumstances?

Some participants suggested that EPA should allow the state to exercise all options under its program authorities before EPA steps in. EPA should target funding for states to put money back into the permitting system to speed it up, with supplemental funding offered as an incentive. Others suggested a federal certification process for training third parties on how to draft permits to present to the state. Many participants supported additional funding to states for running permit programs. EPA should not take over issuing permits just because they expired, asserted some, it should only be done with areas at risk and it should be the burden of EPA to demonstrate the need for issuing the permit itself. Other participants suggested that EPA's job is to "get mean" and see that taxpayers' expectations are carried out (i.e. play a "backstop" role). Ensuring states enforce permits is also a priority.

What actions should be taken for permits on impaired waters prior to completion of a TMDL?

One small group discussed reviewing the classification of streams in detail; separate classifications should be set up specifically for urban segments as the conditions there are particularly challenging. Interim limits should reduce discharges at least for those pollutants for which the water body has been listed. Participants stated that communication with involved parties on listed stream segments is important. Modeling and monitoring are key actions that need to be taken; a few participants suggested adding these requirements to permits.

Listening Panel Feedback

Mr. Lape acknowledged that many participants shared concerns about the interaction between the NPDES program requirements and TMDLs. Listening Panel members heard a long list of issues to be addressed through guidance and national direction, including: timing of permits, reopening/reissuing permits, and implementation. Mr. Lape expressed clear acknowledgment that implementing some controls is easier than others, particularly when capital investment is required. Best management practices in general permits could be presented in two tiers – one for non-impaired waterbodies, another for impaired water bodies. Participants also emphasized challenges posed by anti-backsliding policy, as well as the challenges of implementing TMDLs for storm water and CAFOs. Overall, EPA should promote collaboration, local leadership, monitoring prior to a TMDL and for BMPs, and preventive action in unimpaired watersheds. Finally, Listening Panel members heard the notion of third party involvement and certification for drafting permits.

Facilitated Roundtable Discussions: EPA's Role (continued)

Following the midmorning break, participants continued to engage in small group discussions regarding EPA's role, and focusing on: (1) How can EPA best encourage watershed-based mechanisms; and (2) what should be EPA's role in developing TMDLs for inter-jurisdictional, boundary waters or large rivers such as the Mississippi? The facilitator drew upon key points and issues during a plenary report-out.

How can EPA best encourage watershed-based mechanisms?

Some participants proposed giving more emphasis to watershed-wide hydrologic analyses in developing TMDLs. Others emphasized that EPA must pull together all the stakeholders in the process, encouraging watershed councils patterned after ones in western states. EPA should support monitoring on watershed basis to improve data collection and continue to develop a national framework for trading mechanisms and implementation within watersheds. Support could also be given to watershed groups through statewide organizations, particularly those doing education and training. EPA could provide models of watershed assessment processes to be used for local groups. Participants proposed that EPA explore ways to interface and work with local government. TMDLs on individual pollutants should be clustered and developed on a watershed basis.

EPA should establish minimum watershed standards for trading purposes, addressing among other issues whether trading should be restricted to the same pollutant and same watershed or not. Some participants expressed a fear that trading will be misused, pointing out the need for clear standards and guidance on the issue. A small group proposed dealing with all watershed issues at the same time instead of component by component. These participants suggested that EPA should provide local groups with technical guidance to understand the problems in their waterbody but that the local stakeholders should be the decision-makers, emphasizing the need for a locally-led process, not just local buy-in Another group discussed using current funding programs for compensation or incentives, noting however the need for consequences for not buying into the TMDL program. EPA should promote the creation of basin teams and set up a model with representative groups. Success stories on pollutant trading and watershed approaches could be publicized. Watershed-based programs are not appropriate in all cases, however. EPA should encourage them only when and where they make sense, and then leave it up to the states to be decided. In some cases, a particular discharger is causing the problem and that should be the focus, not the whole watershed.

Some participants recommended that EPA cluster TMDLs. One group voiced support for promoting the watershed approach and modifying the Clean Water Act so it can be used as the organizational structure for all programs to be coordinated into a watershed-based approach. Some urged that EPA never allow the write-off of urban areas; instead, it should mandate criteria as part of a watershed. With regards to coordination, EPA should foster broader discussions between federal agencies. Finally, one small group encouraged EPA to be proactive in providing information on watershed protection, and success stories.

What should be EPA's role in developing TMDLs for inter-jurisdictional, boundary waters, or large rivers such as the Mississippi?

Some participants asserted that EPA should play a strong role in inter-jurisdictional waters and should use its discretion to facilitate and lead in many situations. EPA should continue to support existing multi-state organizations and help states and multi-state areas understand where areas of concern are and give technical assistance and training to deal with the issues through monitoring and resource-targeting. Several groups envisioned EPA taking a facilitative role in these situations. Solutions are dependent on funding, however, asserted one small group. Focusing on economic benefits of implementing TMDLs could help release money in budgets. Local groups should be utilized to help implement solutions; some are already in place but may need additional funding and/or training. Participants pointed out the challenge of EPA fulfilling both a regulatory and facilitative role with regards to TMDLs. Finally, there are many examples of roles EPA could play in the international arena (i.e., Canada, Mexico); EPA should develop models.

Listening Panel Feedback

Mr. Joyner emphasized three points raised by attendees: (1) support for local involvement in developing a watershed approach, and the need for targeted education effort in that regard; (2) support for doing TMDLs at watershed level, looking at the hydrology of the watershed and all pollutants at the same time; and (3) that pollutant trading is a market-based approach that requires a market to work. In the TMDL arena, credits might have a lot of value if EPA does it right. Participants shared general support for pollutant trading but at the same time a need for guidance and controls on it. Mr. Joyner reflected that he didn't hear much about synchronizing permits within a watershed although he thought it was an important issue. Modifying the Clean Water Act might be required.

Mr. Wayland commented on the need to work at a sub-state level to empower watershed groups and local governments on water quality issues. EPA also needs to give multi-state issues additional emphasis and focus, and should look at how to bridge differences between agencies. He also heard participants mention legislation, specifically the Clean Water Act, to give incentives to states and, perhaps, to give authority to watershed groups. He noted how sometimes Clean Water Act mandates get the majority of attention, while many successes in programs are supported by many other kinds of activities that are needed to protect watersheds. Mr. Wayland concluded that he is leaving the Session with a long to-do list inspired by good ideas. EPA will need to be creative about how it can develop synergies with others to accomplish shared goals because no one agency has the capacity on its own. EPA is very interested in pursuing the many suggestions and shared ideas, some of which haven't gotten the attention they deserve. All will help as EPA moves forward through the federal regulation process.

Wrap Up/Next Steps

As the meeting neared its conclusion, Ms. Bannister articulated that she will be taking back many ideas for engaging local governments and stakeholders now – education, outreach, and continuing/starting dialogue. There will be a role for many more people to be playing instead of the singular focus on the EPA-state relationship. EPA will be looking for opportunities to involve more people in developing regulatory solutions for TMDLs. Through ideas generated at the Listening Session, there has already been much progress on how to implement the watershed approach; EPA will take back many ideas and especially incentives for trading. Mr. Lape added his appreciation for participant involvement that assisted him in seeing the connections amongst the issues not solely focused on TMDLs. Important themes including promoting local watershed efforts, the importance of good monitoring and standards, as well as the process for

developing and implementing sound decisions. Mr. Lape envisioned a framework for a rule that would meet significant needs; the preamble and guidance can also work synergistically to meet those needs. For Mr. Lape, the Session was personally valuable in conceptualizing the rule in a win-win way.

Mr. Joyner shared that he came into the Listening Session with several concerns about what type of meeting it would be. Instead, the Session generated many new ideas from individuals and groups under-represented previously. He felt the key charge to EPA is to work out the details of the good ideas presented. This meeting should not be the end of stakeholder participation, rather, stakeholders should continue to work with EPA to craft a revised rule. Mr. Wayland informed the group that there are two remaining Listening Sessions. At the Atlanta Session there were many EPA "ears" listening to the discussion and ideas generated. Many ideas will be explored in further detail at EPA. The challenge will be the short time frame to formulate a new proposal by the spring. For those participants with ideas they did not get a chance to express, Mr. Wayland urged them to send them in written form prior to the development of the formal rule process.

Ms. Bingham and Mr. Wayland thanked the facilitators for their hard work and contributions to the success of the Listening Session.

The meeting adjourned at 12pm.

ATTACHMENT A US EPA TMDL LISTENING SESSION, ATLANTA, GA November 7-8, 2001

PARTICIPANT COMMENT WORKSHEETS

Session One

How can EPA best support and ensure that States develop effective TMDLs?

- lawsuits limit state's ability to produce effective TMDLs (timeline too strict)
- provide more money! why isn't state/EPA accepting data from Adopt-a-Stream program? need to encourage 3rd parties to do work (volunteers)
- need guidance, resources from EPA to be effective
- monitoring, development is very expensive and time consuming we need legal system that allows "good science"
- must account for differences between point and nonpoint sources
- resources technical and funding help provided by EPA, also to EPA regions
- help states by sharing information
- consistent methodology guidance
- provide definition/clarification on existing issues through guidance, i.e. reasonable assurance, where implementation plans come into the TMDL process
- develop incentives and means for state and local governments to work colleagially and do actual work to address problems implementation
- technical assistance/information specifically on how to deal with nonpoint source TMDLs/wet weather issues
- need a focus "to do" list 5 step process proposed in Rule based on real data and better information on effectiveness of BMPs
- have EPA review and approve the process and get them to stay out of the business of reviewing and questioning each TMDL
- EPA could develop model TMDL processes; this might make it simpler for the states to implement
- give targeted funding to states for TMDL development and implementation. Additional funding for point sources. Need more money than 319 programs
- agency needs to pursue interagency cooperation and utilizing other agencies funds for TMDL program.

 More cooperation like EPA USDA
- do a better job at publicizing TMDLs to municipalities
- EPA should provide relief in other regulatory areas to fill up time in TMDL program
- good set of regs that can be used everywhere so that everyone is doing same thing. Promote consistency
- programmatic review. Let states develop programs that get results. TMDL written with implementation plans not practical. EPA should not make it so difficult for states in their rule
- by providing money! Money is needed on the monitoring and studying level. A good monitoring program is necessary, but states need better standards first. Can we avoid TMDLs? Seek alternative method.

Consistency in standards among states would be helpful, especially for states that share water. Can EPA help with this? Concern expressed that waters being listed aren't actually impaired

- state litigation diminishes inertia
- funding from nonpoint sources i.e., solutions w/BMP options
- funding burdens structural aspects, behavioral
- basins teams created physical presence to encourage
- SOP for data collection...listing is compromised. Validation of data
- training and implementation guidance for all key players
- involve local government! In all processes
- more reliable pathogenic indicators
- publish guidelines for listing and delisting streams. They should be guidelines that are required to be followed by all states to facilitate consistency and understanding of the process. Should include specific requirements
- set definitive turn around times for review of TMDLs
- communicate successful methods of TMDL development to other states and stakeholders
- 2 critical things not in place for EPA to move ahead in a timely manner: 1) personnel and 2) financial resources, i.e. 116 positions are vacant. Solution: coordinate with local government sources (other govt. resources) that are available. EPA can play a role in providing funding. Verified by local govt. personnel at the table that they can do a TMDL, but local environmentalists object to them being involved and sue. This is a major problem. Solution: EPA facilitate a group to get TMDLs done. Lack of trust = problem. Bring in groups that can cooperate and work together on a TMDL. Note: program must provide for flexibility to address this type of issue. Data collection and validity is EPA's role possibly, but must be credible and on EPA's database. Training role. 3rd party participation must have a role in the process for valid data collection where trained and able. EPA as money source, facilitator, data validator, trainer, provide incentives and credit to develop TMDLs
- provide additional resources in a form of accountability
- focus on prioritization
- funding for development and implementation (non-match) and timely (quick)
- access to more contractors w/expertise to develop approvable TMDLs; if there aren't more now, please train them
- EPA should promote the program message not getting out that it's a good program
- support science *tags for pollutants/geographic areas
- *define process better*
- EPA would develop "recipes," "cookbooks"
- *tags including people from outside EPA/states (e.g. academia)
- more funding for implementation, better interagency cooperation
- *EPA provide expertise, science (can't provide enough funding)*
- more support for R and D for criteria, pollutants, sources
- share information form all states in timely way
- provide necessary resources, i.e. funding from EPA, USDA, technical support and expertise, prioritization of critical water bodies, public education and volunteer training, water monitoring support, incentives for states which implement TMDLs

- support money; guidance with parameter specific TMDLs; address the lack of data issue; provide guidance on critical components; simple, accurate information
- ensure EPA could develop and implement consequences and/or incentives for states that don't perform correctly; initiate public involvement
- provide better technical/information / technical center
- provide funding to state/county for monitoring
- provide information in other ways than internet
- better networking with state and local government
- reference watersheds combined with science/education center for demonstrating healthy watersheds and educating children/officials
- bridge between state and regulated community (more PR work)
- validation of data used for 303(d) listing and provide clear guidance to states on the QA/QC required for data to be used for listing
- work with the states to develop a reasonable and effective timeline one that allows sound science and data collection then get these approved by the courts and get away from the court administration of the program
- provide assistance in a database for TMDL development
- provide technical expert resources for states when needed
- standardize water quality assessment protocol for 305(b) and 303(d) among states
- provide a model process that is simple and that states can follow in the absence of knowing how to develop a process themselves
- focus on development of consistent guidance from EPA to support development of lists and TMDLs
- provide reference material on watersheds
- provide information to municipalities
- provide the funds to do the research
- employ outside contractors to help recover information
- *education of the public*
- specify violations and incentives
- quick decisions re: reasonable assurance, listing and delisting
- development of guidelines that if followed will expedite approval
- consistency is needed on TMDL development
- *flexibility in methods*
- watershed demo projects to illustrate effectiveness important
- local government use of state and federal funds
- overcome distrust by environmental groups
- coordinate public/private groups with environmental groups
- role for 3rd party participation in establishing TMDL
- more money for state programs
- *more money for monitoring and data collection*
- encourage/support 3rd party TMDL development
- support public education/involvement
- better prioritization (focus on real problems)

- provide money
- where will funds (\$80,000,000/state) come from?
- Information/outreach
- USDA Agricultural cost share with EPA
- monitoring support/better
- fecal coliform standards
- uniform regs
- states need to be given more authority and flexibility in methodology
- speed (timeline) may be more harmful than helpful
- approval authority over states program programmatic oversite rather than TMDL specific
- less reliance on NPDES, more on watershed planning
- consistency in regulations
- guidance (clear!) models, allocations, identification of water bodies
- development of TMDLs within 10 years is possible but implementation needs to be slower
- monetary assistance to states is needed to assist in developing TMDLs
- redefine TMDL to better account for differences between PS and NPS
- TMDLs individual vs. TMDLs as a group and their impact on the body of water•
- consistency
- promoting data collection by third parties at least to determine those water bodies to be added to list
- explicit guidance, money for monitoring
- consistency in regulations/standards; flexibility when appropriate
- establish demonstration watersheds w/science education center
- encourage states to use volunteer-gathered data
- criteria for prioritization (health impacts)
- funding should be based on state's ability to present real water quality improvements
- record differences between point sources and nonpoint sources
- *funding*
- guidance
- "backstop" and science/technical support to facilitate flexible approaches
- simplify "model" approach for listing and TMDLs
- provide better technical info/technical ctr
- provide more funding to state/local government for monitoring/implementation
- provide information via internet
- *demonstration watersheds/education of schools and officials*
- enforcement authority passed down through state to local government ensuring a checks and balance system
- "carrot as well as stick" from EPA i.e., 319 grants to locals

What should be EPA's responsibility for developing lists of impaired waters or a TMDL when states fail to do so? Under what circumstances?

- states have to do the list and if they don't, EPA will do it for them this is not the issue though. Issue is what happens to the list? Does the state re-evaluate every 2 years or simply turn in same list year to year? Require proof and evidence for the state's listings. Need sound technical guidance from EPA, defensible standards that are based on beneficial use of the water bodies. Should we assume that waters are safe until proven otherwise? Test all waters? Cost issue!
- state develops methodologies based on QA/QC data
- should be a publicly supported methodology, including delisting
- state develops list of impaired waters
- EPA must have a consistent and timely review methodology and practice
- EPA provide incentives
- main incentive for state is to keep EPA out
- EPA should act if states don't
- define "when states fail to do so"
- provide better information to states on what steps/information is necessary for states to have/include for developing a list
- provide states concrete comments/feedback to states on where and why state list is deficient and opportunity to correct
- establish a lower tier priority list for waterbodies that there are disagreements between states and EPA about including a water body to the list. This list addressed in next cycle
- EPA should not be adding waterbodies to priority lists
- EPA should have some discretion in providing more time for states to take action
- have EPA provide the resources to allow states to hire the people to do the work
- the TMDL process may need to be simplified so that more of them can be done
- allow academically generated data to be made available for use in TMDL development
- states should develop TMDLs. If EPA needs to step in for TMDL development, EPA should give money to states to develop the TMDL instead of EPA doing it. Send manpower for EPA to help a state with a TMDL instead of taking the TMDL
- EPA could approve/disprove a listing methodology and possibly not be in a position to have to develop a list for a state
- if EPA needs to develop a list for a state, seek actions that will motivate the states to develop TMDLs or assist the states in development
- streams get on list before they are ready for TMDL. Get on list when there is no idea where pollutant is coming from
- need another list where streams get monitored
- too many streams put on list for one bad data point
- guidelines are needed from EPA for listing and delisting. Methodology is needed. EPA needs to develop a procedure
- we prefer EPA not to develop lists when states fail. Concern is that EPA is too far removed from the "situation." This is of particular concern to local governments that will be affected. Suggestion: perhaps EPA could hold back grant money until list is accomplished maybe for 6 months or so. Suggestion: perhaps local government could be offered financial incentives from the EPA to implement list and TMDLs. This way, the local governments may be compelled to interact with the state and "get

the ball rolling" - get the list achieved. Concern: another concern mentioned, what do we mean by "states failure?" There are different degrees of failure. Example: if a state turns in an accurate, complete list compiled using good methodologies, but it is a week late, is that a failure? We didn't think so

- SOP for data collection is listing process data valid?
- EPA provide reasonable oversight and consistency for a watershed across state lines and EPA regions, i.e. Mississippi River
- how does state address another state? (lack of resolution)
- technical support for TMDL development if a state can't comply
- new criteria for listings before reasonable assurance possible new designated uses first
- it should be the states responsibility
- if state does not produce requirement, as last resort, EPA develops the TMDLs
- have the criteria known and available to use and have in developing their lists
- prioritization is important and needed for the process
- if waterbody is impaired by toxics this is an area where EPA may step in if the states do not do so
- develop a list (accepted) and then have a mechanism (process) where the state and EPA work out the list based on quality criteria which is valid and broadly accepted
- data gatherer and give STORET system to those that don't have it; or be the data collector because many entities do have valid and scientifically accepted data
- clearinghouse of data. Actually have someone and somewhere to deposit it
- develop some form of interim/basic TMDL that could be used to move quickly to implementation and then review/update in adaptive approach
- promote better science for basic standards review
- develop models, template, examples to help states/EPA agree on TMDLs
- prepare list if state doesn't
- make states develop list, don't do it for them just provide information on how to do it, what's expected
- EPA should give guidance to states on data requirements for listing
- revamp 319 program to make money more accessible
- provide incentives to states with earlier implementation
- divide TMDL standardization roles between state agencies and EPA within a state
- clear guidance on how stream gets listed and delisted
- EPA should talk about 303(d) as the law talk about it from the real perspective
- provide more criteria for listing
- what is the relevance of this question?
- again, develop consequences
- need for EPA to take some action when state does not act and certification programs for states
- consulting firms could be used to help EPA do TMDLs
- is the program being administered fairly?
- need for EPA administered consultant certification
- if states fail, impose fines until they get it done
- provide review and comment/coordinate with milestones and only step in when state is non-responsive
- where does data come from that the EPA uses? Must have quality data to list impaired waters. Need

- quality control standards. Universities should do 3rd party collection and analysis of data
- states are responsible and should be expected to complete lists and TMDLs on time EPA, however, must be prepared at some point to step in and make sure the work gets done
- use consulting firms
- provide certified training
- EPA should use or appoint outside firms
- EPA mandate a firm when total state cooperation is absent
- develop equitability by publishing guidelines. CALM guidance may be the answer. Side boards should be promulgated by EPA
- when TMDL is for a parameter that is a regional concern
- toxicity issues a priority
- open sharing of data "STORET" data collection program
- provide incentives for states that meet or beat deadlines
- is it realistic for EPA to do it?
- incentives performance/time incentives
- guidance listing and delisting including methodology (with flexibility)
- more classifications than "on or off" the list
- consistency in the process of listing and delisting
- consulting firm; political interest groups impact; third party developing TMDLs in Alabama for paper companies
- consulting firms now EPA sets standards; EPA should develop TMDL if state does not; certification of consulting companies
- consulting firms? contractors? EPA sets standards/certifications
- EPA deadlines are too short
- In Alabama, paper mills have hired consultants to research and challenge TMDLs
- EPA needs to step up when states don't
- states pulling in untrained people need outside expertise
- develop certification process for consultants
- list: getting list done. What is a good list? Listing must have milestones and accountability
- divide workload based on a certain criteria (difficulty, stream importance) between state and EPA by agreement
- due to lawsuits, all states have lists but are they improving these lists each year?
- if state completely fails, EPA should step in (but not otherwise)
- EPA should provide general oversight in transboundary TMDLs (provide communication forum)
- EPA should make methodology more streamlined
- redefine TMDLs to account for NPS tagging #'s to NPS doesn't work
- NPS adaptive management implement, monitor, improve
- list state just has to do it
- TMDL EPA last resort
- EPA needs to make sure listing based on solid evidence
- some disagree on whether to err on side of safety

- need to focus on major rivers
- EPA development after states miss deadline within one year grace period EPA TMDL should be quick and stringent
- certification program for consultants doing TMDL studies by EPA
- is the program being administered fairly consistent standards and enforcement education, etc.

What additional or alternative mechanisms are needed to ensure timely development of TMDLs? Which are best implemented through rulemaking?

- effective guidance and sound standards
- incentive-based programs to ensure implementation
- time schedule should be required (in rules) state should justify their priorities for water quality
- state must take lead in developing
- EPA should provide resources and technical assistance
- time for review is a concern
- locally-led, voluntary, incentive based alternatives
- develop priority lists of impairments based on impacts to humans/aquatics to serve as a focus point for doing TMDLs. Avoid not doing high impact impairments while attacking higher visibility lower impact impairments
- better coordination in permits activities
- allowance for watershed approaches/phased implementation
- should be a collaborative schedule established between states and EPA with states taking lead on establishing with interim milestones
- provide for and support 3rd party TMDLs developed by willing and responsible stakeholder groups
- EPA provide additional technical and financial resources to fill voids in state programs where state is really trying
- concern was expressed about strengthening the rule regarding the data that can be used in a listing determination
- get the data collected by counties and municipalities into the STORET system. Florida is working with their counties and locals to get their data into the system
- reinforce the timetable in the rule with some incentives
- provide information sharing on approaches that work in some states so that other states may take advantage of it
- align TMDL development with river basin planning
- withholding state funds to insure development
- more emphasis on watershed planning
- need to bring in local government more
- revisit the time allowed to develop TMDLs and make sure it's realistic
- take implementation out of TMDL development and get to implementation in other ways
- a realistic schedule must be devised to develop TMDLs for a state's listed waters (maybe 10-15 years). This schedule must be implemented in an incremental progression assign deadlines to each listed water, spread it out over the entire span of time to avoid a backlog (don't cram it all in at the end). If

a state fails to meet some of the deadlines for some of their waters, perhaps the EPA could step in to help finalize the list. For example, the state has 4 years to determine a TMDL for an impaired water. Let's say they fail to do so. The EPA could come in to help the state identify why they failed and give them another length of time (1 year or so) to develop the TMDL. If the state still fails to do so, then the EPA would have to finalize the TMDL

- separate question: interesting real-life example: a company wants to build a power plant in South Carolina and will be discharging to an impaired water that does not yet have a TMDL for it. The state responded by saying, "you (the company) figure it out." They didn't prohibit the act, they just couldn't provide help or a standard or they didn't know what to do. Suggestion: perhaps a company could develop a micro-TMDL for the water for the state?
- funding
- technical assistance and guidance mechanisms, i.e. smaller communities
- TMDL tutorial
- modeling understanding and enhancements to improve product
- tools provided to develop criteria and implementation of TMDL
- stronger working relationship with local government and the EPA itself
- pollutant trading issues resolved
- *CAFO regulations need to be more region-specific and flexible*
- insure basins model works as it should
- data collection again that is accepted and uniform
- training
- facilitator
- prioritize water bodies again; and use public health criteria as well. Endangerment of public health or aquatic health
- refinement of the designated use for the water body
- 10-15 year schedule is appropriate
- more prescriptive rules would not make TMDLs more timely, e.g. having to include implementation plans
- need cost-share incentives, voluntary incentive based approaches, rather than heavy-handed rules
- support phased TMDLs for NPS, i.e. implement, monitor, revise; be flexible with implementation
- provides states enough flexibility to implement meaningful standards
- involve the public a good example is the Savannah Harbor DO TMDL
- provide extra funding sources
- demonstrate economic benefits of cleaning up and protecting waters
- establish a holistic approach to TMDLs
- mandate communications between state, federal, local agencies
- create incentives for states to "do the right thing"
- possibly provide workshops across the lines on TMDLs, implementation and listing
- rule-making and stakeholder process
- more local control on TMDLs
- need to separate enforcement and technical divisions
- split out wasteload allocation from load allocation

- need for incentives or performance awards
- more incentive (grant) programs
- use 3rd party groups to sample but insist and require them to meet the same technical rigor in sampling as others are held to
- rulemaking should be done on broad basis in form of MOA between state and EPA that has details and schedule. Milestones are established and reviewed with stakeholders to keep process moving.

 Rulemaking should not be done on a micro-managed non-flexible basis
- use expertise of state universities not just state grants to ensure quality data that can be used for development of TMDLs. Models can be developed at universities
- ensure tools and methodology developed for technical support of process have been properly reviewed and work (e.g. Basins model). Ensure time frames for TMDL implementation are adequate some more complex TMDLs, e.g. mercury need more time to ensure sound science and consistent development
- use county offices to enforce rules/help enforce
- test the system to see if progress is being made
- have a performance tracking system
- funding needs to be provided and/or withheld if performance is not progressive
- better technical support
- process needs to be developed that is consistent for list approval and speeds up the review and approval process
- develop agreements between EPA and states to split responsibility for TMDL development
- adaptive management as a tool for getting TMDL out faster
- consequences need to be developed as per agreement between EPA and states
- prioritize based on public health issues
- promote or provide incentives for 3rd party TMDL development
- by agreement with states, have EPA take the lead on the more difficult TMDLs
- public education and outreach
- more emphasis on watershed planning/watershed approach
- *define role of local government partner with state and federal*
- find incentive for local government
- make sure time frame is realistic 2 step/phased implementation process
- take implementation out of the process and initiate another method
- reward system for people who will develop TMDL in time
- sustainable forestry; local enforcement authority?
- EPA technical enforcement
- separating TMDL load from individual PS and NPS loads
- need more carrots to reward good performers
- provide predictability
- allow delegation to local governments
- what about conflict of interest at local level?
- split TMDL process from allocation process?
- TMDL is just scientific assimilative capacity, not allocations
- performance track system

- *defining the role of local government and their participation with the state*
- redefining TMDLs for NPS. Not necessarily defining a number, but monitor improvements
- *carrots 319, etc*
- need some schedule with milestones accountability, justify timeline and explain priorities
- strengthen rule to make state and EPA "use all available data"
- states may be ignoring data as from universities
- more local control on TMDL
- separate enforcement and technical divisions in EPA /state and local government
- split out wasteload allocation from load allocation allocations of loads via a "gravity model" process to be used to issue permits

Session Two

What problems associated with the current TMDL program should EPA address in a new TMDL regulation? Which are better addressed in other ways?

- current program comes up short on reasonable assurance local government is ultimate need to be involved, needs time/facilitator's support, promote watershed approach EPA to approve the plan
- establish concept of reasonable progress/reasonable technology BMP, progress over time
- NPS should not be addressed through a daily load. NPS contributions are intermittent. EPA should more fully utilize the 319 program to manage NPS pollution
- are TMDLs an effective method for dealing with NPS pollution?
- many WQ programs are outside TMDL program (construction permits)
- number of effective programs in NPS: BMPs (buffer strips, etc) if farmers don't participate, they will not be permitted
- homeowners can be influenced through education programs
- problem: 2 year listing cycle because BMPs, education take a very long time to implement should be 4 years
- need to have goals but cannot work on PS timeframe
- air deposition also has impact difficult to allocate loads
- nonpoint sources should not be in the TMDL rule, should not be permitted. Use BMPs for agriculture, utilize USDA conservation programs. Recognize USDA and state programs that assist agriculture
- current rule does not differentiate between point and nonpoint sources yet they pose different problems in process and implementation. Need different processes recognizing adaptive management processes for nonpoint sources
- listing need formal methodologies; why are certain rivers or waters listed? Sometimes "poor fish health" has been listed as a reason. Yet identifying the cause is not easy or not possible
- EPA should revamp 319 program takes too long; 60/40 split isn't worth it; too many hoops; need to streamline process 60/40 match 604b/106 100% funding, faster; get projects built faster limits the funds to areas with TMDLs established; will reduce funding allocated, implementation will require significant funding for regional facilities (esp. in urban areas). Assessment, is TMDL required or not; is data accurate/current? Vagueness in regulations/authority (between EPA and state)
- grant money given to local government to develop TMDLs since states may be

- overwhelmed/understaffed
- interagency/inter-entity/stakeholder cooperation USDA/Dept. of Interior/Corps of Engineers
- voluntary incentive is more appealing, more likely to be successful than heavy handed regulations and incentives, i.e. not be required to do additional BMPs and providing funding
- stepped/2-phased approach voluntary implementation and then assessment requirements/regulation lawsuits and how plaintiffs may be agreeable to BMP implementations, BMP maintenance and funding to implement good faith of EPA to allow producer to implement BMPs with assurance of no TMDL changes or non-compliance for 15-20 years
- listening sessions great idea!! listening to stakeholders for a change!
- need to focus on good science
- should allow flexibility with respect to pollutant trading
- there is currently a disconnect between TMDL developers and permit writers
- need to have some discussion of whether coverage under general permits is appropriate for discharges to listed waters
- hard to quantify the nonpoint source contribution
- once quantified, how do we control/reduce NPS contribution
- lack of data to develop effective TMDL implementation plans
- provisions for cost-share initiatives available from other government programs or within EPA
- set backs, buffers, various conservation measures need to encourage NPS BMP programs
- too much regulatory oversight
- don't use finite point source models to regulate nonpoint sources foster and support best management practices
- NRC statistical approaches good for EPA to follow, e.g. uniform standards for data
- what's important listing or delisting?
- problem: lists developed with little or no data
- inconsistent collection methods, dates
- continue to monitor after implementation
- clearer criteria for delisting, same degree of rigor as listing verify water quality improvement, could be pollutant-specific, e.g. habitat/endangered species
- need to be able to identify pollutant, or clear link between impairment and pollutant(s) (e.g., not just "habitat" but habitat problems due to nutrient enrichment)
- "planning list" where data lacking
- need to ensure further sampling is done within "x" years EPA should backstop, should use state's approach once methodology approved
- EPA should be consistent in approving state's methodologies, WQ standards, or use different methodology by eco-region
- no integrated report 305b/303d why? different requirements, different purposes, different goals EPA did not consider exactly how states would implement CALM ok and appropriate
- proposed rule is unreasonable unrealistic expectations of states
- local government should have input into reasonable assurance. They should have a clearer role in the process
- give local governments technical support

- monitoring should be continued after TMDL implementation to ensure improvement of water quality
- question: can nonpoint sources be managed via the TMDL program?
- certainty of permits during TMDL process and after
- improve communication with community, i.e., make web page user-friendly
- consistent methodology and implementation of TMDL, listing and BMP issues
- NPS may be better addressed by local regulations/mandates for BMPs/reduction with effectiveness measured by monitoring % loading
- consider modifying current 2 year reporting cycle
- role of science in regulation must be better defined to ensure transition of the TMDL to permit limits
- reassess timing for more difficult pollutants, i.e., mercury should allow more time
- watershed approach

What are the pros and cons of the 2000 rule?

- implementation plan was too burdensome separate development and implementation
- take very different approach to implementation
- requirement of listing methodology pro
- pollutant trading within watersheds con this would place the burden for reduction on NPS
- in favor of watershed approach need to meet the load reduction for the entire watershed
- cannot do NPS on individual basis
- need federal assistance/cost-share incentives (EQIP, Section 319 grants)
- need to deal with air deposition issues (ammonia, mercury)
- cons involving nonpoint in a permitting program, tying implementation plans to a TMDL, needs to focus on improving the listing program
- pros should work to focus attention on areas where improvement needed
- con how do you deal with mixed source waters and apportioning reductions. 2000 Rule does not effectively address
- pro reasonable assurance for nonpoint sources
- pro took out threatened waters
- pro requirements for listing methodologies (i.e. data quality, data quantity, data age)
- con was this rule supposed to simplify? why did the regs become so lengthly? lost focus (e.g. some water is "impaired" by air deposition. To some, this is not a valid listing
- con of taking out threatened waters is that the regs conflict with the rule. The regs (303d and 305b) include threatened waters and should not be left out of the rule
- pro more emphasis on priority problems
- pro better coordination of listing cycles and permit cycles
- con still focus on point sources 4 year listing cycle could allow problems to be overlooked longer
- pro started addressing this issue finally, forced stakeholders to work together and think holistically, better integration of all the water programs, allows pooling of resources
- con lack of guidance, increased administrative burden, over-stepping authority?
- pro action taken by EPA

- pro facilitate discussion on how to improve watersheds
- pro- rule has brought together other independent programs, such as 319 and section 106, drinking water
- con- oversteps regulatory authority
- reasonable assurance not well defined
- take implementation plans out of TMDL development
- states should define schedule
- cons page 5, third paragraph data and information should be considered...if it exits and is readily available. What does readily available mean? Florida's rule says that other data shall be considered, but to ensure it will be used, it must be in STORET. Con-listing is based entirely on state's listing methodology and not linked to federal requirements
- con- waterway should not come off list simply because a TMDL has been completed
- con if reasonable assurance is given to fix pollutant in future, water will not be listed. This allows for abuse of BMPs by both point source and nonpoint source polluters
- con waters should be listed even if impairment is not identified by "pollutant"
- con if insufficient data is available to determine impairment, and waters are subsequently placed on the planning list, EPA must require (not simply encourage) states to conduct further sampling within "x" years to determine impairment
- con paragraph 4, page 2 it should not be okay for states to delist waters if states methodology does not support listing
- con EPA should provide guidance requirements for states on methodology, WQ assessments. Florida's proposed rule is extremely vague and inconsistent with federal guidelines. EPA once had many problems with Florida's rule, however, these problems have now "disappeared"
- con methodology should not only be consistent with applicable water quality standards, but also consistent with CWA, federal rules and guidance, and state water quality standards
- *sidenote NPDES permits with attached administrative orders should not be allowed to bring facility into compliance
- pro TMDLs are a viable process for acknowledging NPS problems
- pro TMDLs make policing easier
- pro TMDLs do allow states to choose non-regulatory solutions
- con EPA's hammer (regulatory authority) for implementation does not work. Establishment of hard firm numbers for TMDLs for NPS's probably overkill and uses valuable energy that should be aimed at solving problems instead
- pro "backstopping"
- pro flexibility/state lead
- con no provision for milestone and development of schedules that differ among problems. NPS not adequately addressed
- schedule is defined in the rule prioritize implementation based on need, i.e., do the ones with current environmental impact first

What should EPA do to overcome problems in the 2000 rule?

- find some way to promote plans (watershed) and have them approved
- methodology for developing WLA and adaptive management
- estimate of effectiveness of management practices
- schedule is impossible for all state should be able to make case for reasonable schedule
- move towards adaptive management strategies to address NPS
- use programs and other agencies already in place to assist with implementation such as using and adequately funding state forestry agencies
- promote watershed approach for NPS pollution
- federal assistance should be increased need to educate people on their contribution to water impairments it's not just industry and agriculture
- information exchange among the states to increase knowledge bank
- rely on universities for information standards, data collection, monitoring
- follow NY City watershed approach to agriculture
- use voluntary incentive based programs
- use best management practices
- work with USDA
- improve Sec 319 program so that the dollars are used "on the ground" not related to TMDLs
- improved monitoring data to pinpoint problem areas and impacts of improvements/implementation of BMPs for nonpoint sources not necessarily tied to rule issue
- another process or opportunity for input opportunities to debate and discuss needed still (one comment was that EPA ignored items voted on in last facilitation process)
- concern that late spring 2002 not enough time to propose new TMDL rule
- if the EPA had to write the new rule by "tomorrow," they could. It's obvious they have direction or a way the rule should go
- reinforce compliance schedules
- endorse use of intake credits
- provide increased resources for NPS control
- provide incentives for 3rd party involvement in development of TMDLs
- more clear guidance on how to develop or implement TMDL, more success stories
- include public education of the status of our waters cleaner than in the past and making strides to make them even better
- provide additional guidance and resources, even outside EPA, for implementations of voluntary incentive based pollution prevention programs
- focus on BMPs and adaptive management
- provide technical support to implementation
- adaptive management
- adopt realistic goals that are achievable
- incremental improvements
- more specific guidance for state methodology (consistency)
- time limit for TMDL development/implementation, monitoring, assessment
- assurance of improvement due to BMPs

- education needs more attention
- NPS TMDLs best addressed by Ag/forestry entities and adaptive approaches, i.e. watershed approach
- strengthen it
- improve community involvement
- fund more scientific-based studies for NPS controls and provide database. Use more modeling to determine NPS sources and BMP implementation. Use stakeholders/consultants/educators more in process
- endorse watershed management approach for NPS
- more money devoted to education and outreach for NP sources
- redefine use of compliance schedules and phased in actions to recognize lack of technology
- fully endorse use of intake credits
- use of general permits in impaired waters

Session Three

How can we assure timely implementation of TMDLs through NPDES permits? What are the issues and barriers?

- more likely to be effective using watershed management approach instead of NPDES permits need
 more flexibility, example: Lake Okochobee in FL need to build regional water treatment facilities this
 will take time and can't be controlled by a simple permitting system w/little flexibility
- should we wait and see what nonpoint reductions happen before we apply strict controls on point sources
- permitting process won't work alone need EPA/state cooperation
- need to use discretion when applying permits (stormwater, CAFOs)
- coordinate the TMDL development cycle with NPDES permit cycle
- need better information on the effectiveness of BMPs for various constituents
- technical assistance
- outside contractors to expedite permit process
- watershed basis
- longer permit terms for basic permits
- what is a reasonable time period
- new technology depends on timeline for development of this
- *funding for implementation*
- prefer that permit kept to natural cycle
- communication
- public participation
- *notification of affected parties*
- need to make distinction between point and nonpoint sources, and clarify that NPDES will be used to implement point source component
- should require re-opener clause for NPDES permits, but allow discretion to re-open following TMDL development
- should require states to implement TMDL in permit at next renewal and give EPA discretion to take

- over permit after 1 year
- may want to consider holding back grant money
- barriers: need better understanding of how GPs (general permits) and MS4s fit in
- need standards
- need flow
- reasonable definition of what timeliness is make certain quality isn't sacrificed to meet unrealistic time schedules
- barrier is 5 year life span of NPDES permits yet some reasonable compliance schedules may require more than 5 years to complete
- barriers = uncertainty of technology and monitoring methodologies for very low concentration
- barrier = liability issues relative to "trading" holding point sources liable for nonpoint source reductions in trading schemes
- general permits for AFO/CAFO; storm water and others may address management practices that are difficult to translate into numeric values as part of TMDL process
- there would not appear to be anything inherent in NPDES permitting process that would ensure timeliness of implementing TMDLs
- if we agree that major remaining problem is related to nonpoint sources NPDES permit process does not seem well suited to address
- reopener clauses in permit for TMDL pollutant without change in permit expiration
- rotating basin approach with permits renewals
- issues: staggering/cycling, general permits, permits under adm. extension
- barriers: workload and state resources, permit cycles, compliance time tables
- barriers: 1-5 year cycle of permit...integration/point and nonpoint
- language of permits for municipal stormwater...talking as if closed system, when it is not closed
- effluent limits from a planning aspect originally conflict of TMDL aspect
- can't have one size fits all...customizing; region-specific
- sampling requirements can be unwieldy and expensive
- can train locals and certification programs
- education on the issues..that nonpoint sources are vital to reducing the problem! Working with permit holders and with nonpoint polluters is important. Keeping stakeholders involved must be done.

 Notification of changes prior to implementation for permit holders
- look at entire basin
- incorporate watershed protections into NPDES permits
- focus should shift to a watershed-based approach and efforts should be made to coordinate implementation and the 5 year NPDES permit renewal cycle. Implementation should be a phased process using the compliance schedule mechanism of the permits. Some of the more complex TMDLs may take a long time to implement
- issues and barriers pace and schedule
- next to impossible to incorporate a new TMDL on impaired water. Need guidance on how to permit in already impaired waters, i.e. thermal electric evaporate vs. water and concentrates load but does not change the load
- 8 to 15 years to develop TMDLs seems reasonable

- some standards are applied to all waters of the state to meet recreational requirements, including many human-made canals. Question: do we need and can we afford to apply standards to all waters?
- open communication with permittees
- *funding is a barrier*
- permittee appeals
- permittee needs to be notified from the "get-go" that they are on an impaired water
- early notification that TMDLs are coming permit tightening or BMPs should get started
- start monitoring ahead of time closely monitor
- prioritizing NPDES permit waters that are impaired
- establishing milestones and timesheets for TMDLs in the NPDES permits
- for permit renewals when TMDLs are not established; new permits should have monitoring requirements, not limit reductions
- issues and barriers: permits should be reviewed and modified once TMDLs are established, not before knowing what the TMDL target is. Have permits in sync with plans. Funding to effectively accomplish pollutant loading reducitons
- watershed approaches to TMDL implementation should include both point and nonpoint sources
- states need the resources to deal with permitting and TMDLs simultaneously
- who will be responsible for the enforcement of the implementation plan? Is there buy-in by those responsible? Do they have the resources?
- lack of adequate resources (people, equipment, etc.)
- "nonpoint source" not adequately attacked
- sed. TMDLs are "event" related and not "time related?
- targeted funding
- clear delineation of enforcement which crosses jurisdictions/boundaries
- funding from EPA 319 grant to local jurisdictions for education and enforcement
- 303(d) lists should be posted on web sites. This would allow trade groups to be proactive in addressing the problems
- education, education, education!
- incorporating watershed protection in NPDES permits
- implement TMDL at time of NPDES permit renewal
- timely notification of dischargers
- dischargers should be part of TMDL development process
- if significant NPS, have to have incentives to get those TMDL components implemented
- educate citizens EPA should have stronger role
- incentives for agricultural community they want to do the right thing
- cover more animal operations under NPDES
- dischargers should be more involved with NPS implementation formal stakeholder groups
- EPA should provide funding/grants for citizens' groups to conduct education
- put EPA pamphlets at Home Depot, etc.
- start campaign similar to reduce-reuse-recycle for kids put on web for teachers, kids
- target low-income, non-English-speaking audiences, too go through schools, churches
- make sure ag community knows about success stories

- *mobilize and engage everybody*
- cycles of permit 1-5 years
- integration of TMDL to NPDES
- address the sediment loads coming from county dirt roads industry keeps being targeted, but county infrastructure (dirt roads) are continuously disturbed and dumped directly into the waterways
- funding, reopener clauses, etc.
- we need guidance on additional controls (BMPs) or monitoring/reporting requirements for general permits authorizing discharges to impaired waters
- different time frames create confusion
- schedule/pace of TMDL
- time and resources limit state already whether a TMDL has been issued or not. Need flexibility in this
- try to get to rotating basin cycle in each state
- assure there is enough state staff and money to implement the program. Barrier too few staff
- have EPA encourage and help states hire state contract (short term) employees to do the TMDLs. Lack of qualified staff = a real problem in the permitting area
- prioritization is an issue with limited resources you have to address the real water quality discharges that have a problem and address it
- *NPDES not appropriate too inflexible*
- other factors used to be considered use a water plan can be disincentive
- time for permitting process disincentive

What actions should EPA consider in the absence of State action on an expired and administratively continued permit? Under what circumstances?

- in some situations, NPDES permits set unrealistic goals
- should be flexible based on individual situation
- state needs to be able to prove that they are controlling pollution effectively without regulations
- EPA needs to demonstrate that TMDL/NPDES implementation is working facing pressure
- permitting process is a necessity, but since NPDES is currently the only way to deal with these issues/problems EPA is attaching it to water impairments that don't fit with NPDES goals
- if state does not adhere to process, EPA should step in
- provide funding for aquisition of resources
- assist in other areas to free up resources
- we don't feel that EPA should step in. The responsibility has been given to the states and should stay with states
- in consultation with state, if EPA has expertise at state boundaries, EPA should step in
- EPA should assist and encourage the completion of these tasks by the state. Friends helping friends, not mother watching child
- *if irreparable damage*
- reasonable, but flexible, complexity
- must show that they are making efforts
- preventative, even if no TMDL or impaired waterbodies

- EPA must demonstrate burden of proof requiring their intervention
- limit NPDES with TMDL program in terms of prioritizing NPDES permit general and backlog
- gauge actions to environmental impact vs. mere fact that permit has been continued. Also consider whether state is applying resources and working to solve problems
- what is "absence" define
- need to evaluate whether permit impedes on TMDL issue or not
- EPA look to state continuing planning process as a guide for EPA intervention
- prioritize permits needing renewal based on problem
- step in and assist in states (early intervention) oversight
- provide guidance to deal w/barriers
- states need to be accountable through NPDES, not TMDL program
- step into the picture...EPA 'gun' bigger than local state should be reprimanded for allowing lapse
- mediate in controversial permitting issues rather than allowing expiration
- provide technical assistance..don't take over
- *develop tools to speed things up (technical assistance, etc.)*
- determine valid and non-valid issues for continuance
- part of EPA's role has to be to step in
- states are responsible for management of permits. EPA should step in only when the process has completely broken down. It may be prudent for EPA to intervene on permits where state boundaries are involved to ensure consistency in permit conditions
- EPA needs to be the backstop. No actions offered
- complexity of task should be considered
- EPA should step in if harm is imminent. Burden should be on EPA to prove necessity of stepping in
- role if permits expired make high priority
- EPA states say it slows down process when difficult situations are high priority
- EPA should take over the permit
- why should EPA do anything? This may be appropriate until a TMDL is established
- encourage proactivity for improvements affecting water quality in permits
- states need to show accountability for permitting fees and federal resources need to be available to help fund permitting process
- need a carrot and stick approach. Provide targeted resources (carrot) and loss of those resources (stick) if permitting goals are not met
- suggested that tax incentives may be used to improve industry compliance
- difference in handling point source and nonpoint source permits, i.e., "point source" handle through EPA Certified/Trained Consultants, nonpoint source handle through local level. Funding through federal grant program, i.e. 319 grant, etc. to speed permit process
- EPA should use statutory means to get the job done. Taxpayers expect EPA to protect the environment. It may be your job to get tough
- EPA provide tools, technical assistance
- EPA provide recommendations
- depends on whether reason for continuance is valid or not, also on whether TMDL is close to being completed

- EPA should "get mean" that's what tax payers expect. See that job gets done
- mediator/money/technical advice not taking over
- EPA assumption of responsibility for issuance of interim permit renewal; work with states to move on expired permit renewal (use funding leverage if necessary)
- on impaired water bodies and for pollutants, if concerned EPA should issue new strict permits after state misses deadlines for TMDL implementation
- share best practices from states that are effective in issuing permits and completing their TMDL programs
- EPA offer a model to states that are having problems
- delegation agreement state process should be exhausted
- reopener clauses in permits

What actions should be taken for permits on impaired waters prior to completion of a TMDL?

- one regulation does not fit all need to be flexible in regulating dischargers in the interim process
- should not reissue permits until TMDL is completed? if you know that the facility is discharging pollutant of concern, need to work with discharger to bring pollutant levels to forseeable limits
- NPDES permits are on 5-year cycle, so that may allow for implementation time
- need time and monitoring (through TMDL development) to determine what's going on in watershed
- more emphasis on impaired waters than unimpaired waters in general permits. Include monitoring requirements?
- permittees should have opportunity to collect and submit monitoring results to characterize their impacts
- notification and assistance on implementing voluntary BMPs. Target these areas with technical assistance and grants/cost-share funds to accomplish reducing loads in a more timely manner. Until TMDL is established, the current framework should be used but may be for a shorter term 2 vs. 5 years
- dialogue must be initiated
- focus on sources of impairment and focus on those stakeholders
- monitoring
- BMPs/education
- compliance assistance focused on permittees in impaired waters
- "holding the line" during TMDL "offsets" to increases
- take as little action new initiatives as possible/necessary prior to TMDL completion do a rough draft estimate of TMDL to guide evaluation/decisions on whether credit can be given for future potential reductions in other areas use for reasonable background levels address real sources vs. pointing to all sources. Pushing responsibility on NPDES discharge example air deposition
- foster voluntary discussions among stakeholders to see what they believe can be done and implemented perhaps obviate need for TMDL improve data and information
- evaluate whether compliance with existing permits if not, why not, are limits reasonable
- flexibility given to states through guidance
- additional monitoring
- BMPs without implementation compliance

- interim limits using performance based values
- concerns: no net addition, compliance schedule
- classification (new i.e. urban) for designated uses....re-evaluation of exiting permits
- reassessments of permitted amounts
- monitoring needs to be addressed industry by industry
- current data a must especially on watershed characterization!
- different permit for impaired waters
- incentives for permit holders to begin reductions
- fundamental to development of meaningful TMDLs is confirmation of the data set that indicates a TMDL is warranted. A data gathering/confirmation process should occur prior to moving to final TMDL implementation
- consideration should be given to adding additional conditions to general permits for impaired waters to ensure further deterioration of the watershed does not occur
- permit should be issued with requirement to revisit after TMDL is completed
- may take years to establish TMDLs in NPS watersheds
- begin implementation of BMPs based on best science for NPS and adopt as science is better understood and TMDL can be applied
- dialogue! Start informing permittee as soon as it's known that water is impaired
- monitor pollutant to get data
- dischargers should voluntarily start working fixing problems
- have interim unity in permitting
- don't wait for TMDLs to address permit problems
- advance monitoring
- establish incentives for conservation and pollution prevention trading, funding
- increased monitoring and modeling/ensuring compliance
- review the feasibility (technology) of reducing pollutants/permit limits on existing permits
- set reasonable reductions based on current technology that will lead toward expected TMDL targets, but do not require reductions that will likely be less than the expected TMDL targets
- optimize existing 'point source' permit limits and set a fixed (3 yr) review time period. Submit plan for improvement and timeframe [POAM]
- no net increase in pollutant loading until TMDL developed
- get some reduction if information is available
- never allow increase in anticipation of other reductions!
- reevaluation of total load allocation
- monitor list
- require BMPs to be utilized
- renewal of such permits should be conditional upon additional ambient monitoring (perhaps not specifically required by permit); no increase in discharge if problem pollutants
- permits are not rights. Where necessary, permits should be strengthened
- compliance assistance on out of compliance permits directed to impaired waters
- offsets for any new discharge

- information data based on BMPs can be added to the mix of information considered
- look at on a watershed basis again to see the total effect of positive, proactive activities taken on in the watershed have made a difference. We are monitoring, doing studies. <u>Use</u> them
- permits should not be revised until TMDL completed

Session Four

How can EPA best encourage watershed-based mechanisms? (Watershed permitting? Pollutant trading? Watershed approaches to cluster TMDLs?)

- permitting should be en masse to increase efficiency
- compensations for riparian strips in agriculture has worked...what about "urban" aspect? Buffers, BMPs, etc...
- regions/watersheds funding for public education on NPS!
- strong consolidated effort (national campaign)
- work with other agencies to consolidate resources in public education
- creation of sub-watershed for reducing "crowded" stakeholders and committees condition
- use a HUC designator propose 12 digit as cut off for EPA mandatory TMDL limits
- encourage states to cluster TMDLs into watersheds
- establish minimum water quality standards for large watershed units trading purpose
- determine what the mechanism is for trading between watersheds on same river and different rivers
- information on these mechanisms
- take know-your-watershed further get everyone together to understand watershed and work on solutions
- modify CWA to include a watershed approach or otherwise will remain voluntary
- coordinate all federal programs on watershed basis (NPDES, SWAP, CERCLA, etc.)
- EPA should never allow write-off of urban areas they're part of watershed too
- watershed TMDLs set large framework and then bring it to a smaller scale when necessary
- take advantage of existing programs as much as possible (EQIP, etc. tie those together)
- pollutant trading between point and nonpoint only when it makes sense; don't do it just to do it
- endorse and encourage state BMPs for nonpoint sources BMPs are not watershed sensitive in most cases. Note: permits define "terms and conditions" for nonpoint sources
- funding, resources, guidance, information sharing (lessons learned), training for state and public
- EPA can develop framework for trading program through regs or guidance
- *support monitoring efforts that produce high quality data and information*
- address airshed issues or groundwater issues (communication across program boundaries)
- include nonpoint and point sources in the 'know your watershed' information
- link land use and water quality related to development
- right now it's too piece-meal, need to better coordinate efforts between programs and agencies
- look at case studies. Watersheds already working as a unit
- stakeholder involvement
- "total" watershed analysis esp. nonpoint source funding through EPA for analysis
- must pull together all stakeholders in process

- EPA needs to look at airsheds, ground watersheds. Sizes? Entities? Models? Jurisdictions?
- involve stakeholders including general public in discussions/deliberations on what needs to be done and how best to do it within the watershed encourage formation of watershed groups, encourage watershed planning
- funding and technical assistance for watershed monitoring
- provide a model watershed assessment process for local use
- educate public on what has been done, is being done and can be done under existing program include basic education on basic water quality issues and TMDL program/requirements
- focused education for local public officials develop and provide tool kits, explanation of impacts economic on action/no-action scenarios
- help establish more positive atmosphere for pollutant trading address liability issues, modeling on trading scenarios, complete guidance document on pollutant trading
- flexibility on administratively continued permits to allow watershed clustering. Some permits in other watersheds may need to be continued while focusing on other watersheds
- foster community groups
- *flexibility for innovative holistic approaches (Project XL?)*
- education to increase awareness
- recognize that locally-led process is more than buy-in. It is education to recognize the problem and then locally-led decisions to decide the fix. Need catalyst at local level. EPA establish grant program for locals to use to hire coordinators. Program should have a low local cost share

What should be EPA's role in developing TMDLs for inter-jurisdictional, boundary waters, or large rivers such as the Mississippi?

- EPA should moderate or courts will
- EPA act as facilitator and guidance from beginning w/specific timelines for interstate waters
- coordination with federal agencies and others bring them to the table, make decisions
- EPA should come in when one or more states requests, as facilitator, or to develop TMDL
- public counting on EPA to develop these TMDLs, or to have a large role in these
- EPA should act as facilitator (at minimum) for transboundary TMDLs set up a forum
- all listings should begin from the major watersheds and go up through the HUCs in a process to discover which tributaries are actually needing attention then those can be addressed
- more direct involvement, study, collaborative efforts (Gulf of Mexico, Chesapeake Bay), mediation between states
- tech assistance, 615 data and mapping
- implementation? 319 funding guidance, active mediation with states
- coordination with all parties, EPA, Corps, etc., facilitate integration
- when one or more states ask that EPA come in and develop a TMDL
- facilitator to "cause" the action to happen
- avoid doing TMDLs a priority on interstate waters EPA probably headquarters serve as facilitator, mediator, arbitrator for states and monitor EPA regions on interstate waters

- EPA develop TMDLs only as a last resort when impasse among states or by request by states
- watershed approach to inter-jurisdictional approaches

Open Session Comments

- If 3rd party sampling is utilized, it must be according to good scientific protocols we don't need vigilantes providing bogus data
- point sources can be administered at the state level nonpoint sources will be administered at the local level funds, resources and education needs to get to the county level for nonpoint solutions and accountability
- BMPs are the solution for nonpoint sources